## **FORM PV.7**

**Effective: 10-1-15** 

## **Photovoltaic Calculation Worksheet**



## **Inverter information:**

1.	Are DC/AC Converters used? Yes No
2.	DC/AC Converter Model #:
3.	Max A/C Output Current:
4.	Amps Max # of DC/AC Converters in an Input Circuit:
5.	DC/AC Converter Max DC Input Voltage:
6.	Volts Max AC Output Current:
7.	Volts DC/AC Converter Max DC Input Power: Watts
<u>Si</u>	zing Inverter Output Conductors & PV Breaker:
1.	Sizing Inverter Output Circuit Conductors and OCPD

3. Inverter Output Circuit Conductor Size = \_\_\_\_\_ AWG (Table 1)

Table 1. Minimum Inverter Output OCPD and Circuit Conductor Size:										
Inverter Continuous Output Current Rating (Amps)	12	16	20	24	28	32	36	40	48	
Minimum Breaker (OCPD Size) (Amps)	15	20	25	30	35	40	45	50	60	
Minimum Conductor Size (AWG), (90°C, Copper)	14	12	10	10	8	8	6	6	6	

## **Point of Connection to Utility**

1. Only load side connections are permitted with this plan.

2. Inverter Output OCPD rating = \_\_\_\_\_ Amps (Table 1)

- 2. The PV Breaker is positioned at the opposite end from input feeder location or main Breaker location.
- 3. The Max Combined PV System OCPD(s) at 120%.

Table 2. Maximum Combined Supply OCPDs Based on Bus Bar Rating (Amps) per CEC 705.12(D)(2)											
Bus Bar Rating	100	125	125	200	200	200	225	225	225		
Main Breaker OCPD	100	100	125	150	175	200	175	200	225		
Max Combined PV System OCPD(s) at 120% of Bus Bar Rating	20	50	25	60*	60*	40	60*	60*	45		
Max Combined PV System OCPD(s) at 100% Bus Bar Rating	0	25	0	50	25	0	50	25	0		

<sup>\*</sup>This value has been lowered to 60 A from the calculated value to reflect 10 kW AC size maximum. Reduction of the main breaker is not permitted with this plan.